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an exceedingly small nebula of unimagined faintness. With a power of 200 my suspicion that it was not a star was confirmed.

In a few minutes I ran across another, which in every particular was exactly like it, both being north of its companion star, and of the same distance apart about 4′, and of the same size and faintness. But for the excellent seeing and superiority of my periscopic eyepiece for revealing faint nebulæ, they would have escaped detection. If they are as distant as their companion stars, they must vastly exceed in volume the orbit of Neptune, and yet are self-luminous.

List No. 7 of Nebulæ discovered at the Lowe Observatory, Echo Mountain, California. By Lewis Swift.

No.	Date.			1900·0. R. A.			Dec.			Description.
				h	m	s	°	′	″	
1	1898.	Jan.	22	9	23	0	−42	24	30	pB, S, R, 7^{m} ✱ nf, D ✱ p.
2	1897.	Dec.	30	9	45	0	−32	23	5	pB, pS, eeE, spindle, 7^{m} ✱ np, np of 2. Not 3038.
			30	9	45	35	−32	25	5	eeF, eS, 3F st close f, sf of 2.
4			30	9	52	32	−31	48	0	vF, S, R, $7\frac{1}{2}^{m}$ ✱ np, 2 or 3 Fst near.
5			30	10	24	30	−35	3	15	eeeF, eeS, R, eF ✱ in contact sp of 2.
6	1898.	Jan.	1	10	26	3	−28	12	30	pF, vS, R, trapezium near sp.
7			1	10	27	10	−29	52	35	eeeF, pL, R, D ✱ nr sf, ✱ with dist comp. f and p.
8	1897.	Dec.	30	10	35	12	−35	31	35	eeeF, eeS, R, eF ✱ in contact sf of 2.
9	1898.	Jan.	1	11	17	0	−28	27	30	pB, pS, R, 10^{m} ✱ close n little f, 7^{m} ✱ f.
10	1897.	Dec.	29	11	49	35	−37	21	5	eF, vS, 7^{m} ✱ sp.
11			30	12	0	30	−27	22	45	vF, L, lE, 8^{m} ✱ nr f, np of 2.
12	1898.	Jan.	1	12	0	35	−27	24	25	eeeF, pL, eE, 3 8^{m} st f, sf of 2.
13			31	12	3	25	−31	2	15	pB, vS, ✱ close sf, vE 45°.
14			1	12	14	28	−25	37	15	pB, S, R, bet 4 st sf and 8^{m} ✱ np.
15			30	12	18	45	−39	14	0	pF, vS, R, close p of 4373. See note.
16			1	12	20	0	−25	30	15	eF, vS, R, bet 7^{m} ✱ sf and 8^{m} ✱ np, v dif.
17			30	12	22	5	−38	48	50	pB, pL, R, 7^{m} ✱ with dist comp. near p.
18			1	12	45	0	−25	22	15	eeeF, S, R, 8^{m} ✱ nf.
19			31	12	46	0	−29	27	35	B, S, lE, 9^{m} ✱ near sf.
20			31	13	11	10	−31	33	45	pB, pS, R.
21			31	13	12	5	−31	7	45	eeeF, pL, R, 9^{m} ✱ nr sp, e dif.
22			31	13	18	25	−29	47	37	eeF, pS, R, trapezium nr sf.
23			30	13	31	0	−33	35	0	pL, pS, lbM.
24			30	13	31	10	−33	33	55	eeeF, eeS, like D ✱, one nebulous. Note.
25			30	13	51	35	−39	31	50	8^{m} ✱ in eeeF nebulosity. See note.

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Notes.

No. 15 forms D nebula with 4373. Strange *h* failed to see it.

No. 24. This is another of that variety resembling a close D ✱, making four I have lately found, dis. about $4''$. That they are physically connected is highly probable.

No. 25. This is a nebulous star, the only one I have ever found. The central star is about 8^m, and surrounded with an exceedingly faint atmosphere. An 8^m star follows 15^s, which was free from nebulosity.

Some of the above list are quite interesting objects, especially for their brightness and size, and their remaining so long undiscovered. This list makes the number of nebulæ discovered at this Observatory 205. I find the southern sky visible from this Observatory an interesting field for the search of nebulæ.

List No. 8 *of Nebulæ discovered at the Lowe Observatory, Echo Mountain, California, for* 1900·0. By Lewis Swift.

No.	Date.		R.A.			Dec.			Description.
	1898.		h	m	s	°	′	″	
1	Feb.	22	5	29	20	−36	28	30	eeeF, eeS, eeeE, eee dif. See note.
2		14	5	30	8	−23	24	15	eF, vS, R, 8^m ✱ f 10^s in field with 1979.
3	Jan.	31	5	47	40	−38	22	45	eeeF, S, cE, semi circle of 3 st, S, v dif.
4	Feb.	20	9	31	5	−11	56	30	pB, pL, R, 2 st near f.
5		19	9	39	40	−31	18	35	eF, S, R, vF ✱ close nf, pB ✱ near sp.
6	Jan.	12	9	45	5	−32	27	40	eeeF, pS, vE, bet below ✱ and 8^m ✱ p, nf of 2.
7		12	9	45	30	−32	27	45	eeeF, eeeS, R, D ✱ close sf, sp, of 2.
8	Feb.	19	9	52	40	−31	47	40	vF, pS, R, 8^m ✱ p.
9		15	9	55	25	−29	10	30	eeeF, pS, cE, trapezium n and nf, D ✱ np.
10		14	9	59	25	−27	4	50	eeF, L, cE, no B ✱ nr, no Δ as per 3113.
11		15	10	27	30	−23	32	10	eeeF, eS, eE, 8^m ✱ close p, eee dif.
12		15	10	31	30	−23	34	10	eF, pS, R, bet 2 D st sp and nf.
13		22	10	32	35	−10	35	55	CB, eS, Stellar.
14		14	10	33	25	−26	32	20	pF, pS, D ✱ nr p. See note.
15	Jan.	14	10	58	30	−15	41	45	eeF, eeS, looks like a D ✱.
16	Feb.	12	11	26	50	−29	52	40	vF, pS, R, sf of 3717.
17		22	11	44	0	−11	45	40	eF, cL, iR, Δ with ✱ n and another f.
18		20	11	45	25	−19	1	57	B, S, eE, a ray.
19		15	12	14	10	−25	35	20	pF, vS, R, 8^m ✱ nr np.
20		15	12	35	15	−36	13	20	pF, vS, 2 or 3 vF st in contact.
21		23	12	44	20	− 3	51	25	eeF, L, eE, 7^m ✱ nr s little f.
22	Jan.	31	12	55	0	−31	43	50	eeF, pS, R, 10^m ✱ nr nf.
23		30	13	59	40	−38	43	40	eeF, pS. R, bet 2 st, nr centre of trapezium.
24	Feb.	22	14	6	50	−30	3	33	F, pS, R, surrounded with sev F st.
25		22	14	28	20	−27	7	18	pB, eS, R, looks like a D ✱ one nebulous.

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